

Exploring Motion

1-5 The student will demonstrate an understanding of the positions and motions of objects. (Physical Science)

1.5.3 Illustrate the fact that sound is produced by vibrating objects.

Taxonomy level: 2.2-B Understand Conceptual Knowledge

Previous/Future knowledge: This is a foundational concept that students will develop further in future grades. This is the first time that students have been introduced to the concept of how sound is produced. In 3rd grade, students will recall that vibrations produce sound (3-5.5) and will compare features of sound including pitch and volume (3-5.6), ways to change volume (3-5.7), and how vibrations affect pitch (3-5.8).

It is essential for students to know that sound is made when an object vibrates. *Vibrate* means that an object moves back and forth.

Examples of some ways that sound vibration can be illustrated are:

- Putting your hands on your throat and speaking
- Plucking a rubber band
- Strumming a guitar string
- Hitting a ruler on a desk

It is not essential for students to know pitch or volume at this grade level.

Assessment Guidelines:

The objective of this indicator is to *illustrate* how sound is produced; therefore; the primary focus of assessment should be to give a specific examples of ways that sound can be produced. However, appropriate assessments should also require students to *exemplify* objects that will vibrate; or *recognize* from pictures or diagrams when an object is vibrating.